AMENDMENTS TO THE CLAIMS

1-32 (Canceled)

33. (Currently Amended) A method for protecting an article from a high-temperature oxidative environment, said method comprising:

providing a substrate, said substrate comprising a material selected from the group consisting of a nickel-based superalloy, a cobalt-based superalloy, and an iron-based superalloy;

disposing a first coating layer onto said substrate, wherein said first coating layer comprises nickel (Ni), zirconium (Zr), and aluminum (Al); and

disposing a second coating layer onto said first coating layer, wherein said second coating layer comprises at least about 90 atomic percent aluminum.

34. (Original) The method of claim 33, wherein disposing said second coating layer comprises disposing said second layer using a physical vapor deposition technique selected from the group consisting of electron beam physical vapor deposition and ion plasma deposition.

35. (Original) The method of claim 33, wherein disposing said second coating layer comprises disposing a layer comprising at least about 95 atomic percent aluminum.

36. (Previously Presented) The method of claim 33, wherein said second coating layer consists essentially of aluminum.

37. (Original) The method of claim 33, wherein disposing said second coating layer comprises disposing a layer having a thickness of at least about 5 micrometers.

38. (Original) The method of claim 37, wherein said thickness is in the range from about 5 micrometers to about 20 micrometers.

39. (Original) The method of claim 33, wherein disposing said first layer comprises disposing said first layer using a technique selected from the group consisting of ion plasma deposition, electron beam physical vapor deposition, thermal spray deposition, and plasma spray deposition.

40. (Currently Amended) The method of claim 33, wherein disposing said first layer comprises disposing a first layer further comprising at least one element selected from the group

consisting of chromium (Cr), ~~zirconium (Zr),~~ up to about 20 atomic percent cobalt (Co), and up to about 20 atomic percent iron (Fe).

41. (Previously Presented) The method of claim 40, wherein said first layer comprises Cr, and wherein said Cr is present in said first layer at a concentration of up to about 15 atomic percent.

42. (Original) The method of claim 41, wherein said Cr is present in said first layer at a concentration in the range from about 4 atomic percent to about 12 atomic percent.

43. (Currently Amended) The method of claim 33 ~~40~~, wherein said ~~first layer comprises Zr, and wherein said~~ Zr is present in said first layer at a concentration of up to about 2 atomic percent.

44. (Original) The method of claim 43, wherein said Zr is present at a concentration in the range from about 0.2 atomic percent to about 0.8 atomic percent.

45. (Original) The method of claim 40, wherein disposing said first layer comprises disposing a first layer further comprising at least one element selected from the group consisting of hafnium (Hf), yttrium (Y), silicon (Si), titanium (Ti), lanthanum (La), cerium (Ce), and tantalum (Ta).

46. (Currently Amended) The method of claim 33, wherein disposing said first coating layer comprises disposing a layer having a thickness of at least ~~greater than~~ about 10 micrometers.

47. (Original) The method of claim 46, wherein said thickness is in the range from about 10 micrometers to about 100 micrometers.

48. (Original) The method of claim 47, wherein said thickness is in the range from about 25 micrometers to about 75 micrometers.

49. (Original) The method of claim 33, further comprising reacting said first coating layer with said second coating layer to form a reacted coating layer.

50. (Original) The method of claim 49, wherein said reacted coating layer comprises a substantially single-phase coating comprising an aluminide intermetallic compound.

51. (Original) The method of claim 50, wherein said single phase of said reacted coating layer comprises a B2-structured nickel aluminide (NiAl) phase.

52. (Original) The method of claim 50, wherein said reacted coating layer further comprises a gradient in Al composition, said gradient extending from a first Al concentration level at an outer surface of said reacted coating layer to a second Al concentration level at an interface between said substantially single-phase coating and said substrate, wherein said first Al concentration level is greater than said second Al concentration level and said second concentration level is at least about 30 atomic percent Al.

53. (Original) The method of claim 49, wherein reacting comprises heat-treating said first layer and said second layer.

54. (Original) The method of claim 53, wherein heat-treating comprises heating said substrate in situ during deposition of said second coating layer.

55. (Canceled)

56. (Canceled)

57. (Currently Amended) The method of claim 3356, wherein providing said substrate ~~superalloy~~ comprises providing a component of a gas turbine assembly.

58. (Original) The method of claim 57, wherein providing said component comprises providing at least one of a turbine airfoil, a turbine disk, and a combustor.

59. (Previously Presented) The method of claim 49, further comprising disposing a thermal barrier coating over said reacted coating layer.

60. (Original) The method of claim 59, wherein disposing said thermal barrier coating comprises disposing a ceramic material.

61. (Original) The method of claim 60, wherein disposing said ceramic material comprises disposing a material comprising yttria-stabilized zirconia.

62. (Original) A method for protecting an article from a high-temperature, oxidative environment, said method comprising:

providing a metallic substrate;

disposing a first coating layer onto said substrate, wherein said first coating layer comprises nickel (Ni), aluminum (Al), chromium (Cr), zirconium (Zr), up to about 20 atomic percent cobalt (Co), and up to about 20 atomic percent iron (Fe);

disposing a second coating layer onto said first coating layer using a physical vapor deposition technique selected from the group consisting of electron beam physical vapor deposition and ion plasma deposition, wherein said second coating layer consists essentially of aluminum; and

reacting said first coating layer with said second coating layer to form a substantially single-phase reacted coating layer comprising a B2-structured nickel aluminide and further comprising a gradient in Al composition, said gradient extending from a first Al concentration level at an outer surface of said reacted coating layer to a second Al concentration level at an interface between said substantially single-phase coating and said substrate, wherein said first Al concentration level is greater than said second Al concentration level and said second concentration level is at least about 30 atomic percent Al.

63. (New) The method of claim 33, further comprising disposing a thermal barrier coating over said second coating layer.